

Abstract

A positron emission camera comprising a plurality of scintillators, wherein the scintillators include $\text{LuAlO}_3\text{:Ce}$ ($\text{Lu}_x\text{Y}_{1-x}\text{AP}$ where $0.5 \leq x \leq 0.995$) based
5 crystals (18,20). In particular, the scintillation crystals (18,20) are $\text{Lu}_x\text{Y}_{1-x}\text{AP}$ where $0.5 \leq x \leq 0.995$.